N1-2 CONFIGURATION POST 3A UMBILICAL OPERATIONS

1. VERIFY FGB POWER GENERATION STATUS
   On EV GO:

PCS1 Tasks: 3A Assembly Config
3A Assembly Config
'FGB EPS'

√Main Bus Volt 1,2 (two): 28.0 --- 29.0
√Battery Voltage 1 thru 6 (six) > 25.5

****
* If any Battery Voltage < 25.5 V *
* Notify **MCC-H**: "FGB Batteries low." *
* Wait 1 revolution for FGB battery charge. *
****

2. COMMAND RACU 5 ON

SM 204 FGB

√COMMANDING - INH (Moscow commanding)

If COMMANDING - INH

RUSSIAN GROUND	AOS	LOS
Pass 1	___/___:___:___	___/___:___:___
Pass 2	___/___:___:___	___/___:___:___

Shuttle ⇓ **MCC-H**: "Ready for RACU 5 Power On."
MCC-H ⇒ **MCC-M**: "Go for RACU 5 Power On."
MCC-M ⇒ **MCC-H** ⇑ shuttle: "RACU 5 Power On at ___/__:__:__."

If COMMANDING - ENA (crew commanding)
Shuttle ⇓ **MCC-H**: "Ready for RACU 5 Power On."
MCC-M ⇒ **MCC-H**: "Go for RACU 5 Power On."
MCC-H ⇑ shuttle: "Moscow Go for RACU 5 Power On."

On MCC GO:

PCS1 3A Assembly Config
'FGB EPS'

cmd RACU 5 Power - On

√RACU 5 Power - On

√Input Current > 3.0 A
√Output Current > 0.3 A
√Output Voltage: 121 --- 125

NOTE
Output current should be 0.5 at power on. Current could be as high as 10 A after MDM initialization (approximately 2.5 minutes), depending on heater usage.

Shuttle ⇓ **MCC-H**: "RACU 5 Power On at ___/__:__:__ GMT."

****
* If Output Current > 10 A *
* **cmd** RACU 5 - Off *
* √**MCC-H** *
****

3. VERIFY MDM STATES
'Primary NCS'

√MDM ID - N1-1
√Major State - Primary
√Frame Count - <incrementing>

'Secondary NCS'

√MDM ID - N1-2
√Major State - Standby
√Frame Count - <incrementing>

4. COMMAND N1-1 TO SECONDARY
'N1-1 MDM'

cmd Secondary State - Transition
√Frame Count - <static>

NOTE
N1-2 will go to Primary in 20 seconds.

5. TELEMETRY RECOVERY ON OIU

NOTE
Expect 'S62 PDI DECOM FAIL' message.

CRT | SM 212 OIU |

BUS 3 BC - ITEM 11 EXEC
BUS 4 RT - ITEM 14 EXEC
Change OIU N1 Phys Dev to N1-2 - ITEM 18 +3 EXEC
Reload OIU FORMAT - ITEM 1 +2 EXEC

6. TELEMETRY RECOVERY ON PCS

PCS2 sel icon to open PCS CDS Main Control Panel Window
√Status box - yellow

sel 'Connect to MDM'
√Status box - green
Verify 'connected to MDM' indicated

7. VERIFY MDM STATES

PCS2 'Primary NCS'

√MDM ID - N1-2
√MDM State - Primary
√Frame Count - <incrementing>

'Secondary NCS'

√MDM ID - N1-1
√MDM State - Secondary
√Frame Count - <incrementing>

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*  If States are not correct or no   *
*    N1-2 telemetry, √MCC-H          *
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8. ENABLE RT DEVICE I/O ON EPS BUSES

'Primary NCS UB EPS N1 23 RPCM'

PCS2 **cmd** N1RS2 A - Ena
cmd N1RS2 B - Ena
cmd N1RS2 C - Ena
√RT Inhibit 20, 19, 18 (three) - <blank>

9. ENABLE NCS AUTO RETRY

'Secondary NCS'

cmd Auto Retry - Ena
√Auto Retry - Enable

10. PROVIDE POWER TO N1-2 MDM SDO CARD

'N1-2 SDO Card Power'

cmd RPCM N1RS2 C RPC 3 - Cl
√Pos - Cl
√Tripped - No

11. REACTIVATE EARLY COMM HEATERS

NOTE
The Early Comm equipment powered by Stbd CBM RPCs.

'ECOMM Heaters'

cmd N1RS1 C RPC 6,13 (two) - Cl
√Pos 6,13 (two) - Cl
√Tripped 6,13 (two) - No

cmd N1RS1 A RPC 5 - Cl
√Pos 5 - Cl
√Tripped 5 - No